

## ABSTRACT

5           The present invention provides methods which permit animal owners or food producers to readily establish the vaccination status of animals. Specifically, the present invention provides a method for determining whether an animal has been vaccinated with a vaccine which includes an immunogen and a substantially non-toxic rmLT by detecting the presence of antibodies or immune cells in an animal that are specific for the rmLT. Furthermore, the present invention provides a  
10   method for marking a vaccine composition by including in the vaccine composition a substantially non-toxic rmLT and detecting the presence of antibodies or immune cells in animals administered with such vaccine composition. Moreover, the present invention provides a method for enhancing the immunoprotective effects of an immunogen in a vaccine by including in the vaccine a substantially non-toxic rmLT. Vaccine compositions containing an immunogen, a substantially  
15   non-toxic rmLT and an oil-in-water emulsion adjuvant such as AMPHIGEN<sup>®</sup>, are also provided.